Supreme Court of the United States.

No. 4, Original.—October Term, 1902.

The State of Missouri, Complainant,
vs.
The State of Illinois et al.

Motion for appointment of a Special Commissioner to take testimony.

[November 17, 1902.]

This cause coming on to be heard on the application of the parties, duly appearing by their counsel, for the appointment of a special commissioner to take testimony herein, and their stipulation in regard to the same heretofore filed by leave, and said application and stipulation having been duly considered:

It is ordered, That Mr. Frank S. Bright, a member of this bar and a resident of the District of Columbia, be and he is hereby appointed a commissioner to take and return the testimony in this cause, with the powers of a master in chancery as provided in the rules of this court; but said commissioner shall not make any findings of fact or state any conclusions of law.

It is further ordered, That the taking of testimony on complainant's behalf shall begin on the first day of December, A. D. 1902, at such place as counsel for complainant may designate, ten days' notice thereof to be given counsel for defendants; and shall be concluded on or before the twenty-eighth day of February, A. D. 1903; that the taking of testimony on behalf of defendants shall commence on the second day of March and be concluded on or before the first day of June, A. D. 1903, ten days' notice of the place where such testimony will be taken being given to counsel for complainant: that testimony in rebuttal shall then be taken, five days' notice of the place being given, and shall be concluded on or before the fifteenth day of June, A. D. 1903; and thereafter defendants may take further testimony until the first day of July, A. D. 1903, at which time the taking of testimony in the cause shall be closed.

Said commissioner shall report to the court the testimony taken by him, without findings of fact or conclusions of law, with all convenient speed, and shall receive, as agreed by the parties, twenty dollars per day for his compensation, and his actual expenses, an itemized statement of which shall accompany his report.

True copy.

Test:

Clerk Supreme Court, U. S.

Supreme Court of the United States.

No. 4, Original.—October Term, 1905.

State of Missouri, Plaintiff,
vs.
State of Illinois and The Sanitary District of Chicago, Defendants.

[February 19, 1906.]

Mr. Justice Holmes delivered the opinion of the Court.

This is a suit brought by the State of Missouri to restrain the discharge of the sewage of Chicago through an artificial channel into the Desplaines River, in the State of Illinois. That river empties into the Illinois River, and the latter empties into the Mississippi at a point about forty-three miles above the city of St. Louis. It was alleged in the bill that the result of the threatened discharge would be to send fifteen hundred tons of poisonous filth daily into the Mississippi, to deposit great quantities of the same upon the part of the bed of the last-named river belonging to the plaintiff, and so to poison the water of that river, upon which various of the plaintiff's cities, towns and inhabitants depended, as to make it unfit for drinking, agricultural, or manufacturing purposes. It was alleged that the defendant Sanitary District was acting in pursuance of a statute of the State of Illinois and as an agency of that State. The case is stated at length in 180 U. S. 208, where a demurrer to the bill was overruled. A supplemental bill alleges that since the filing of the original bill the drainage canal has been opened and put into operation and has produced and is producing all the evils which were apprehended when the injunction first was asked. The answers deny the plaintiff's case, allege that the new plan sends the water of the Illinois River into the Mississippi much purer than it was before, that many towns and cities of the plaintiff along the Missouri and Mississippi discharge their sewage into those rivers, and that if there is any trouble the plaintiff must look nearer home for the cause.

The decision upon the demurrer discussed mainly the jurisdiction of the Court, and, as leave to answer was given when the demurrer was overruled, naturally there was no very precise consideration of the principles of law to be applied if the plaintiff should prove its case. That was left to the future with the general intimation that the nuisance must be made out upon determinate and satisfactory evidence, that it must not be doubtful

and that the danger must be shown to be real and immediate. The nuisance set forth in the bill was one which would be of international importance—a visible change of a great river from a pure stream into a polluted and poisoned ditch. The only question presented was whether as between the States of the Union this Court was competent to deal with a situation which, if it arose between independent sovereignties, might lead to war. Whatever differences of opinion there might be upon matters of detail, the jurisdiction and authority of this Court to deal with such a case as that is not open to doubt. But the evidence now is in, the actual facts have required for their establishment the most ingenious experiments, and for their interpretation the most subtle speculations, of modern science, and therefore it becomes necessary at the present stage to consider somewhat more nicely than heretofore how the evidence it is to be approached.

The first question to be answered was put in the well known case of the Wheeling bridge. *Pennsylvania* v. *Wheeling & Belmont Bridge Co.*, 13 How. 518. In that case, also, there was a bill brought by a State to restrain a public nuisance, the erection of a bridge alleged to obstruct navigation, and a supplemental bill to abate it after it was erected. The question was put most explicitly by the dissenting judges but it was accepted by all as fundamental. The Chief Justice observed that if the bridge was a nuisance it was an offence against the sovereignty whose laws had been violated, and he asked what sovereignty that was. 13 How. 561. Daniel, J., 13 How. 599. (See also *Kansas* v. *Colorado*, 185 U. S. 125.) It could not be Virginia, because that State had purported to authorize it by statute. The Chief Justice found no prohibition by the United States. 13 How. 580. No third source of law was suggested by any one. The majority accepted the Chief Justice's postulate, and found an answer in what Congress had done.

It hardly was disputed that Congress could deal with the matter under its power to regulate commerce. The majority observed that although Congress had not declared in terms that a State should not obstruct the navigation of the Ohio, by bridges, yet it had regulated navigation upon that river in various ways and had sanctioned the compact between Virginia and Kentucky when Kentucky was let into the Union. By that compact the use and navigation of the Ohio, so far as the territory of either State lay thereon, was to be free and common to the citizens of the United States. The compact, by the sanction of Congress, had become a law of the Union. A State law which violated it was unconstitutional. Obstructing the navigation of the river was said to violate it, and it was added that more was not necessary to give a civil remedy for an injury done by the obstruction. 13 How. 565, 566. At a later stage of the case, after Congress had authorized the bridge, it was stated again in so many words that the ground of the former decision was that "the Act of the

Legislature of Virginia afforded no authority or justification. It was in conflict with the Acts of Congress, which were the paramount law." 18 How. 421, 429.

In the case at bar, whether Congress could act or not, there is no suggestion that it has forbidden the action of Illinois. The only ground on which that State's conduct can be called in question is one which must be implied from the words of the Constitution. The Constitution extends the judicial power of the United States to controversies between two or more States and between a State and citizens of another State, and gives this Court original jurisdiction in cases in which a State shall be a party. Therefore, if one State raises a controversy with another, this Court must determine whether there is any principle of law and, if any, what, on which the plaintiff can recover. But the fact that this Court must decide does not mean, of course, that it takes the place of a legislature. Some principles it must have power to declare. For instance, when a dispute arises about boundaries, this Court must determine the line, and in doing so must be governed by rules explicitly or implicitly recognized. *Rhode Island* v. *Massachusetts*, 12 Pet. 657, 737. It must follow and apply those rules, even if legislation of one or both of the States seems to stand in the way. But the words of the Constitution would be a narrow ground upon which to construct and apply to the relations between States the same system of municipal law in all its details which would be applied between individuals. If we suppose a case which did not fall within the power of Congress to regulate, the result of a declaration of rights by this Court would be the establishment of a rule which would be irrevocable by any power except that of this Court to reverse its own decision, an amendment of the Constitution, or possibly an agreement between the States sanctioned by the legislature of the United States.

The difficulties in the way of establishing such a system of law might not be insuperable, but they would be great and new. Take the question of prescription in a case like the present. The reasons on which prescription for a public nuisance is denied or may be granted to an individual as against the sovereign power to which he is subject have no application to an independent State. See 1 Oppenheim, International Law, 293, §§ 242, 243. It would be contradicting a fundamental principle of human nature to allow no effect to the lapse of time, however long, *Davis* v. *Mills*, 194 U. S. 451, 457, yet the fixing of a definite time usually belongs to the Legislature rather than the Courts. The Courts did fix a time in the rule against perpetuities, but the usual course, as in the instances of statutes of limitation, the duration of patents, the age of majority, etc., is to depend upon the lawmaking power.

It is decided that a case such as is made by the bill may be a ground for relief. The purpose of the foregoing observations is not to lay a founda-

tion for departing from that decision, but simply to illustrate the great and serious caution with which it is necessary to approach the question whether a case is proved. It may be imagined that a nuisance might be created by a State upon a navigable river like the Danube, which would amount to a *casus belli* for a State lower down, unless removed. If such a nuisance were created by a State upon the Mississippi the controversy would be resolved by the more peaceful means of a suit in this Court. But it does not follow that every matter which would warrant a resort to equity by one citizen against another in the same jurisdiction equally would warrant an interference by this Court with the action of a State. It hardly can be that we should be ~~warranted~~ in declaring statutes ordaining such action void in every instance where the Circuit Court might intervene in a private suit, upon no other ground than analogy to some selected system of municipal law, and the fact that we have jurisdiction over controversies between States.

The nearest analogy would be found in those cases in which an easement has been declared in favor of land in one State over land in another. But there the right is recognized on the assumption of a concurrence between the two States, the one, so to speak, offering the right, the other permitting it to be accepted. *Mannville Co.* v. *Worcester*, 138 Mass. 89. But when the State itself is concerned and by its legislation expressly repudiates the right set up, an entirely different question is presented.

Before this Court ought to intervene the case should be of serious magnitude, clearly and fully proved, and the principle to be applied should be one which the Court is prepared deliberately to maintain against all considerations on the other side. See *Kansas* v. *Colorado*, 185 U. S. 125.

As to the principle to be laid down the caution necessary is manifest. It is a question of the first magnitude whether the destiny of the great rivers is to be the sewers of the cities along their banks or to be protected against everything which threatens their purity. To decide the whole matter at one blow by an irrevocable fiat would be at least premature. If we are to judge by what the plaintiff itself permits, the discharge of sewage into the Mississippi by cities and towns is to be expected. We believe that the practice of discharging into the river is general along its banks, except where the levees of Louisiana have led to a different course. The argument for the plaintiff asserts it to be proper within certain limits. These are facts to be considered. Even in cases between individuals some consideration is given to the practical course of events. In the black country of England parties would not be expected to stand upon extreme rights. *St. Helen's Smelting Co.* v. *Tipping*, 11 H. L. C. 642. See *Boston Ferrule Co.* v. *Hills*, 159 Mass. 147, 150. Where, as here, the plaintiff has sovereign powers and deliberately permits discharges similar to those

of which it complains, it not only offers a standard to which the defendant has the right to appeal, but, as some of those discharges are above the intake of St. Louis, it warrants the defendant in demanding the strictest proof that the plaintiff's own conduct does not produce the result, or at least so conduce to it that courts should not be curious to apportion the blame.

We have studied the plaintiff's statement of the facts in detail and have perused the evidence, but it is unnecessary for the purposes of decision to do more than give the general result in a very simple way. At the outset we cannot but be struck by the consideration that if this suit had been brought fifty years ago it almost necessarily would have failed. There is no pretense that there is a nuisance of the simple kind that was known to the older common law. There is nothing which can be detected by the unassisted senses—no visible increase of filth, no new smell. On the contrary, it is proved that the great volume of pure water from Lake Michigan which is mixed with the sewage at the start has improved the Illinois River in these respects to a noticeable extent. Formerly it was sluggish and ill smelling. Now it is a comparatively clear stream to which edible fish have returned. Its water is drunk by the fishermen, it is said without evil results. The plaintiff's case depends upon an inference of the unseen. It draws the inference from two propositions. First, that typhoid fever has increased considerably since the change and that other explanations have been disproved, and second, that the bacillus of typhoid can and does survive the journey and reach the intake of St. Louis in the Mississippi.

We assume the now prevailing scientific explanation of typhoid fever to be correct. But when we go beyond that assumption everything is involved in doubt. The data upon which an increase in the deaths from typhoid fever in St. Louis is alleged are disputed. The elimination of other causes is denied. The experts differ as to the time and distance within which a stream would purify itself. No case of an epidemic caused by infection at so remote a source is brought forward and the cases which are produced are controverted. The plaintiff obviously must be cautious upon this point, for if this suit should succeed many others would follow, and it not improbably would find itself a defendant to a bill by one or more of the States lower down upon the Mississippi. The distance which the sewage has to travel (357 miles) is not open to debate, but the time of transit to be inferred from experiments with floats is estimated at varying from eight to eighteen and a half days, with forty-eight hours more from intake to distribution, and when corrected by observations of bacteria is greatly prolonged by the defendants. The experiments of the defendant's experts lead them to the opinion that a typhoid bacillus could not survive the journey, while those on the other side maintain that it might live and keep its power for

twenty-five days or more, and arrive at St. Louis. Upon the question at issue, whether the new discharge from Chicago hurts St. Louis, there is a categorical contradiction between the experts on the two sides.

The Chicago drainage canal was opened on January 17, 1900. The deaths from typhoid fever in St. Louis, before and after that date, are stated somewhat differently in different places. We give them mainly from the plaintiff's brief: 1890, 140; 1891, 165; 1892, 441; 1893, 215; 1894, 171; 1895, 106; 1896, 106; 1897, 125; 1898, 95; 1899, 131; 1900, 154; 1901, 181; 1902, 216; 1903, 281. It is argued for the defendant that the numbers for the later years have been enlarged by carrying over cases which in earlier years would have been put into a miscellaneous column (intermittent, remittent, typho-malaria, etc., etc.,) but we assume that the increase is real. Nevertheless, comparing the last four years with the earlier ones, it is obvious that the ground for a specific inference is very narrow, if we stopped at this point. The plaintiff argues that the increase must be due to Chicago, since there is nothing corresponding to it in the watersheds of the Missouri or Mississippi. On the other hand, the defendant points out that there has been no such enhanced rate of typhoid on the banks of the Illinois as would have been found if the opening of the drainage canal were the true cause.

Both sides agree that the detection of the typhoid bacillus in the water is not to be expected. But the plaintiff relies upon proof that such bacilli are discharged into the Chicago sewage in considerable quantities; that the number of bacilli in the water of the Illinois is much increased, including the *bacillus coli communis*, which is admitted to be an index of contamination, and that the chemical analyses lead to the same inference. To prove that the typhoid bacillus could make the journey an experiment was tried with the *bacillus prodigiosus*, which seems to have been unknown, or nearly unknown, in these waters. After preliminary trials, in which these bacilli emptied into the Mississippi near the mouth of the Illinois were found near the St. Louis intake and in St. Louis in times varying from three days to a month, one hundred and seven barrels of the same, said to contain one thousand million bacilli to the cubic centimeter, were put into the drainage canal near the starting point on November 6, and on December 4 an example was found at the St. Louis intake tower. Four others were found on the three following days, two at the tower and two at the mouth of the Illinois. As this bacillus is asserted to have about the same length of life in sunlight in living waters as the *bacillus typhosus*, although it is a little more hardy, the experiment is thought to prove one element of the plaintiff's case, although the very small number found in many samples of water is thought by the other side to indicate that practically no typhoid germs would get through. It seems to

be conceded that the purification of the Illinois by the large dilution from Lake Michigan (nine parts or more in ten) would increase the danger, as it now generally is believed that the bacteria of decay, the saprophytes, which flourish in stagnant pools, destroy the pathogenic germs. Of course the addition of so much water to the Illinois also increases its speed.

On the other hand, the defendant's evidence shows a reduction in the chemical and bacterial accompaniments of pollution in a given quantity of water, which would be natural in view of the mixture of nine parts to one from Lake Michigan. It affirms that the Illinois is better or no worse at its mouth than it was before, and makes it at least uncertain how much of the present pollution is due to Chicago and how much to sources further down, not complained of in the bill. It contends that if any bacilli should get through they would be scattered and enfeebled and would do no harm. The defendant also sets against the experiment with the *bacillus prodigiosus* a no less striking experiment with typhoid germs suspended in the Illinois River in permeable sacs. According to this the duration of the life of these germs has been much exaggerated, and in that water would not be more than three or four days. It is suggested, by way of criticism, that the germs may not have been of normal strength, that the conditions were less favorable than if they had floated down in a comparatively unchanging body of water, and that the germs may have escaped, but the experiment raises at least a serious doubt. Further, it hardly is denied that there is no parallelism in detail between the increase and decrease of typhoid fever in Chicago and St. Louis. The defendant's experts maintain that the water of the Missouri is worse than that of the Illinois, while it contributes a much larger proportion to the intake. The evidence is very strong that it is necessary for St. Louis to take preventive measures, by filtration or otherwise, against the dangers of the plaintiff's own creation or from other sources than Illinois. What will protect against one will protect against another. The presence of causes of infection from the plaintiff's action makes the case weaker in principle as well as harder to prove than one in which all came from a single source.

Some stress was laid on the proposition that Chicago is not on the natural watershed of the Mississippi, because of a rise of a few feet between the Desplaines and the Chicago Rivers. We perceive no reason for a distinction on this ground. The natural features relied upon are of the smallest. And if under any circumstances they could affect the case, it is enough to say that Illinois brought Chicago into the Mississippi watershed in pursuance not only of its own statutes, but also of the acts of Congress of March 30, 1822, c. 14, 3 St. 659, and March 2, 1827, c. 51, 4 St. 234, the validity of which is not disputed. *Wisconsin* v. *Duluth*, 96 U. S. 379. Of course these acts do not grant the right to discharge sewage, but the case stands no

differently in point of law from a suit because of the discharge from Peoria into the Illinois, or from any other or all the other cities on the banks of that stream.

We might go more into detail, but we believe that we have said enough to explain our point of view and our opinion of the evidence as it stands. What the future may develop of course we cannot tell. But our conclusion upon the present evidence is that the case proved falls so far below the allegations of the bill that it is not brought within the principles heretofore established in the cause.

Bill dismissed without prejudice.

True copy.

Test:

Clerk Supreme Court, U. S.

Supreme Court of the United States.

No. 4, Original.—October Term, 1905.

The State of Missouri, Plaintiff,
vs.
The State of Illinois and The Sanitary District of Chicago.

[May 28, 1906.]

Mr. Justice Holmes delivered the opinion of the Court.

This is a motion for the allowance and taxation of costs in the case reported in 200 U. S. 496. The costs asked are as follows:

$5,650 paid to the special commissioner.

$3,776.37 for taking down and transcribing the testimony of defendant's witnesses, &c.

$720 Solicitors' fees, viz., $20 for attendance at final hearing and $2.50 for each deposition taken and admitted in evidence, in accordance with Rev. Stat. § 824.

$10,146.37, total. The plaintiff objected to the allowance and the Clerk referred the matter to this Court.

The only question of detail concerns the last item. The main objection is to the allowance of any costs at all. The power of the Court to allow costs is not disputed. *Pennsylvania* v. *Wheeling & Belmont Bridge Co.*, 18 How. 460. The former decree in this case allowed them, and in the stipulation for the appointment of a Special Commissioner the parties agreed that the costs should be "taxed by the Court on the final disposal of the case, to be paid in such manner as the Court may at that time determine." But it is said that it is inconsistent with the dignity of a sovereign State to ask for costs; that in boundary cases costs have been divided, and that the suit was not for a pecuniary interest, but only the performance of the duty of a sovereign to its citizens, for which no costs should be imposed.

So far as the dignity of the State is concerned, that is its own affair. The United States has not been above taking costs. *United States* v. *Sanborn*, 135 U. S. 271. As to the supposed rule in boundary cases, it is not absolute. But in many cases of that kind both parties are equally interested to have the boundary settled, and whichever State begins the suit both equally are actors. Thus counter-relief was asked by the defendants in *Nebraska* v. *Iowa*, 143 U. S. 359 and *Missouri* v. *Iowa*, 160 U. S. 688. As to the nature of this suit, the plaintiff alleged serious pecuniary damage

to itself by the deposit of great quantities of filth upon the portion of the bed of the Mississippi alleged to belong to it, and, in short, framed its bill like any ordinary bill by a private person to restrain a nuisance. The chief difference was in the size of the nuisance alleged. There is no indication that the defendants desired or needed the determination of this Court, as States well might when their jurisdiction was in doubt. So far as this point is concerned, there is no reason why the plaintiff should not suffer the usual consequence of failure to establish its case.

The only item specially discussed is the charge of $2.50 for each witness examined before the examiner, on the footing of "depositions" mentioned in Rev. Sts. § 824. There seems to have been some difference of opinion in the lower Courts as to whether testimony given before an examiner could be treated as a deposition. See *Strauss* v. *Meyer*, 22 Fed. Rep. 467; 1 Foster's Fed. Prac. 3d ed. 727, § 330. In favor of so treating it are *Ferguson* v. *Dent*, 46 Fed. 88, *Harter* v. *Brown*, 44 Fed. 734, *Ingham* v. *Pierce*, 37 Fed. 647, *The Sallie P. Linderman*, 22 Fed. 557; *Stimpson* v. *Brooks*, 3 Blatchf. 456. See also *St. Matthew's Sav. Bank* v. *Fidelity Casualty Co.*, 105 Fed. 161, 162, 163. The words of the statute are broad enough to embrace the testimony, unless they are taken very strictly, and the trouble to the parties in having to visit different places was similar to that caused by the taking of depositions adverted to by Judge Treat in *Strauss* v. *Meyer*. The case is quite distinct from that of testimony taken in court and reduced to writing by a reporter. We are of opinion that the item may be allowed.

Motion for costs allowed.

True copy.

Test:

Clerk Supreme Court, U. S.